

Using Collector and Survey123 for Invasive Plants Management

Presented by:

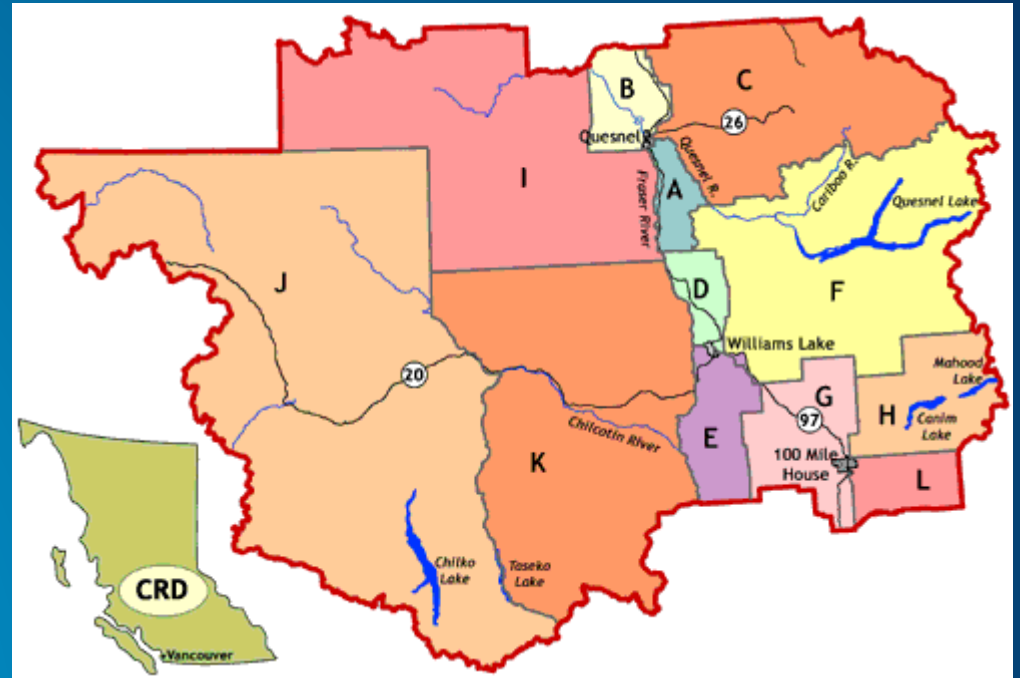
Jessica Larson, Information Technology Support

Cariboo Regional District

June 6, 2017

Cariboo Regional District

- Approximately 60,000 residents
- Located in the BC Central Interior
- Large Area – 80,262 square kilometres
- ESRI user since 2001



Invasive Plants Management Program

- Function of the CRD since 1979
- Currently 26 high priority invasive species
- Chemical, mechanical, and biological control



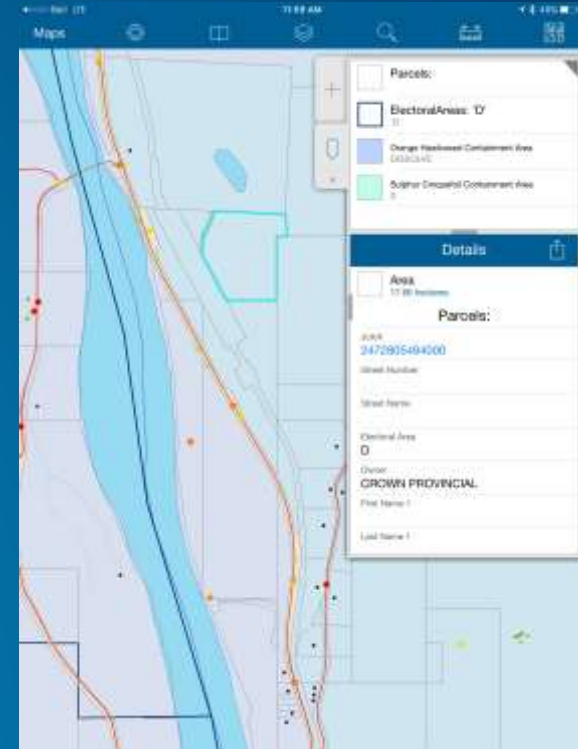
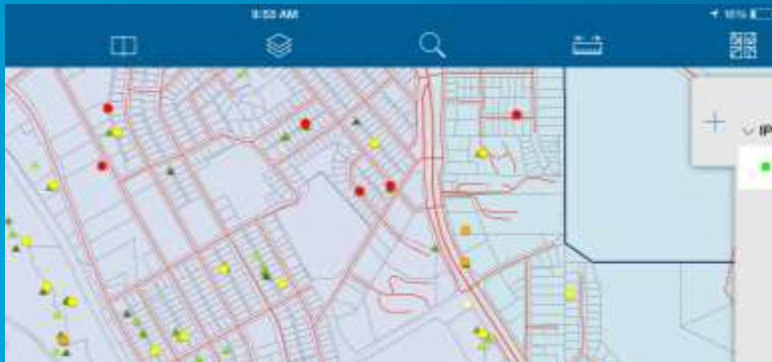
The Early Years

- PDAs and external GPS
- Windows tablets and ArcPad
- Synchronization problems
- Data loss and duplication of data entry



Introduction of Collector for ArcGIS - 2015

- Offline access to CRD map
- Collection of points indicating invasive plant occurrences
- Disconnected editing and simple synchronization of edits



Introduction of Survey123 for ArcGIS - 2017

- Digital collection of treatment records
- Ease of field data collection
- Data validation
- CSV output at seasons end for upload to provincial database



Survey123

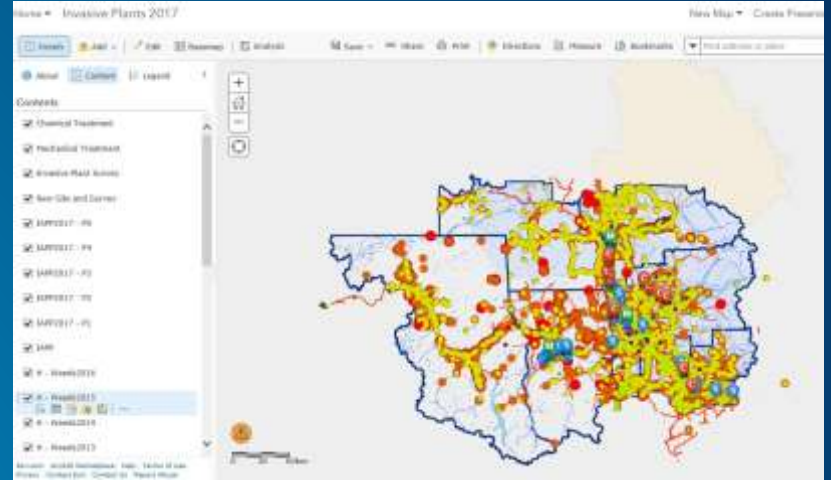
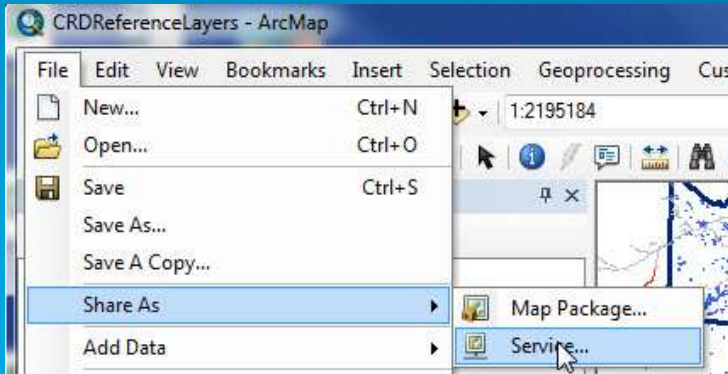
- Create surveys using Survey123 Connect for ArcGIS
- Publish surveys to ArcGIS Online

The screenshot shows the Survey123 Connect for ArcGIS interface. At the top, there are three tabs: 'Form Preview', 'Schema Preview', and 'Settings'. The main title is 'Chemical Treatment'. Below the title, there is a 'Location' field with a red bar indicating 'No Location' and a map. A red button says 'Press to capture location using a map'. Below the map, there are two text input fields: 'Site ID *' and 'Site Paper File ID'. At the bottom right, there is a green button with a checkmark and the text 'Validate Input'.

	type	name	label	appearance
7	integer	SiteIDChemTreat	Site ID	
8	text	SitePaperFileID	Site Paper File ID	
9	select_one PMP	PMPNumber	PMP Confirmation Number	horizontal
10	text	PUPNumber	PUP Number	
11	date	ChemTreatDate	Treatment Date	
12	text	TreatPaperFileID	Treatment Paper File ID	
13	select_one Employee	ApplicatorFirst	Applicator 1	minimal
14	hidden	ApplicatorLast	ApplicatorLast	

ArcGIS Online

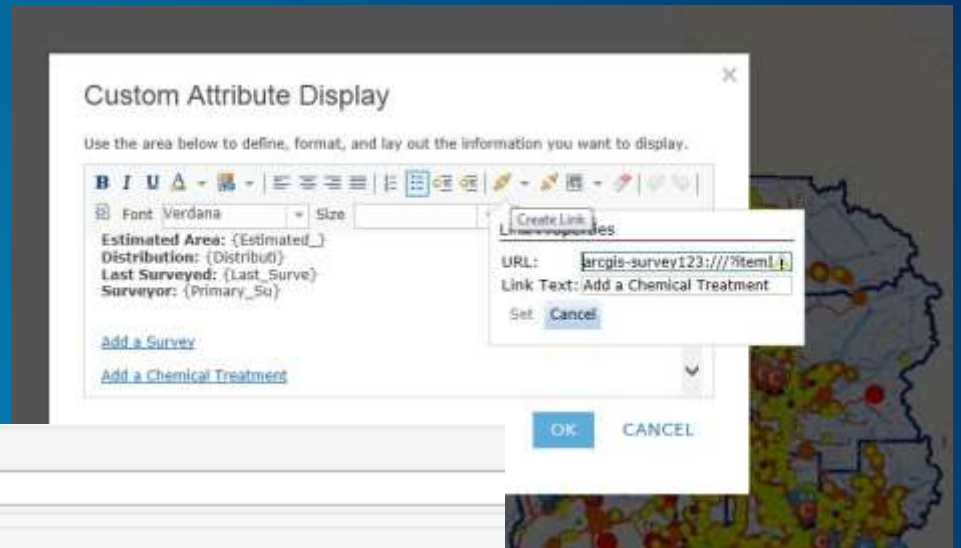
- Create MXD(s) with relevant informational layers and share as a service



- Create and configure Web Map
- Add all reference layers
- Add Survey123 layers

Collector and Survey123 integration

- Creating links in a custom attribute display allowed users to load Survey123 with some fields already filled with data.



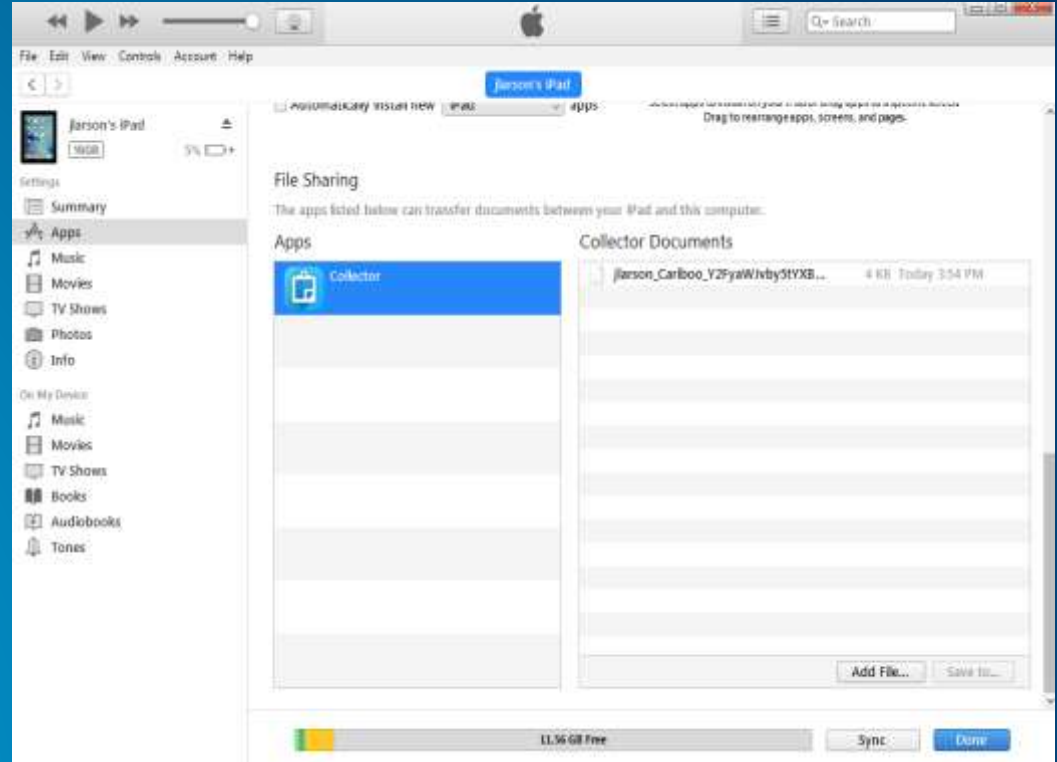
Site ID *	279623
Site Paper File ID	G_2472740339022
Treatment Date *	May 30, 2017

iPad Setup

- Load the Collector and Survey123 apps

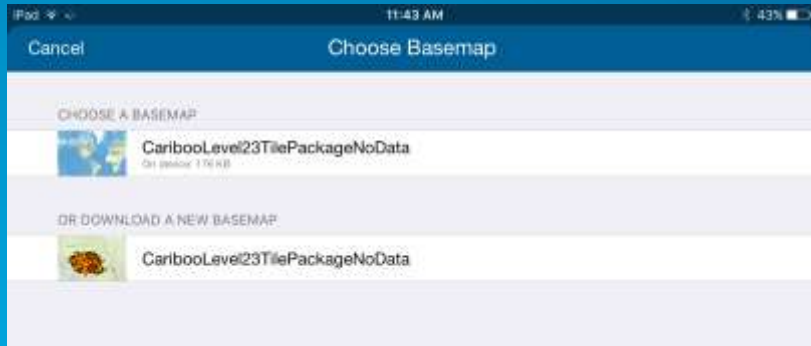


- Side-load basemap

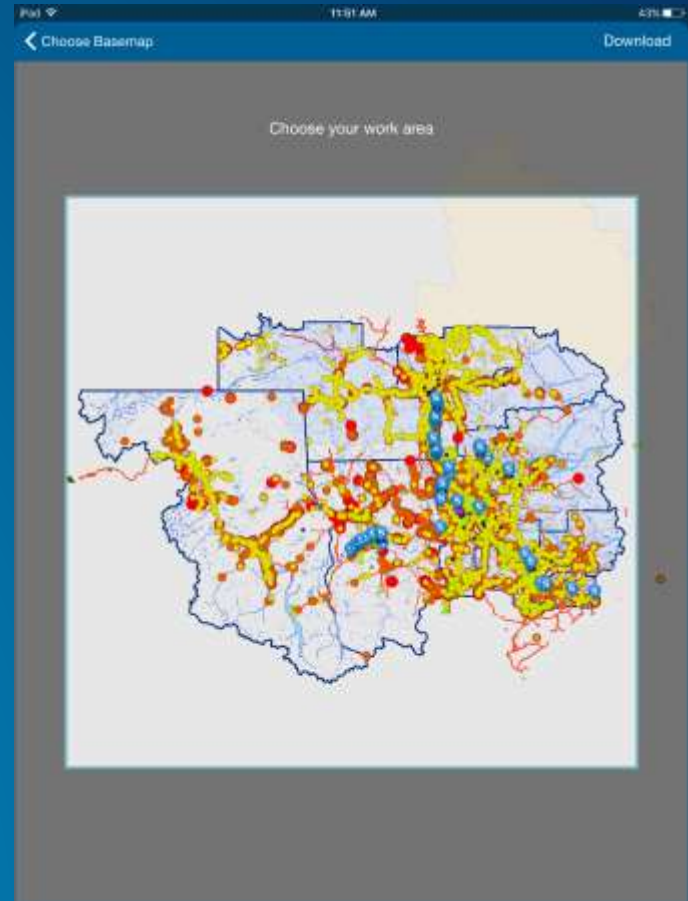


iPad Setup

- In Collector, select the locally stored basemap

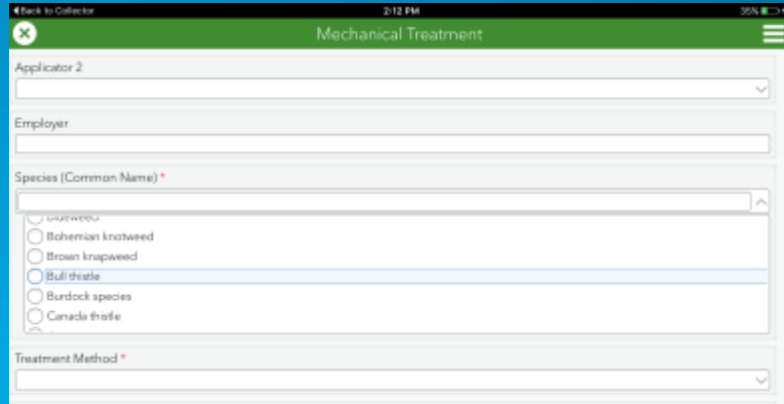


- Download



iPad Setup

- In Survey123, download the available surveys



Back to Collector 2:12 PM 35%

Mechanical Treatment

Applicator 2

Employer

Species (Common Name) *

unknown

Bohemian knotweed

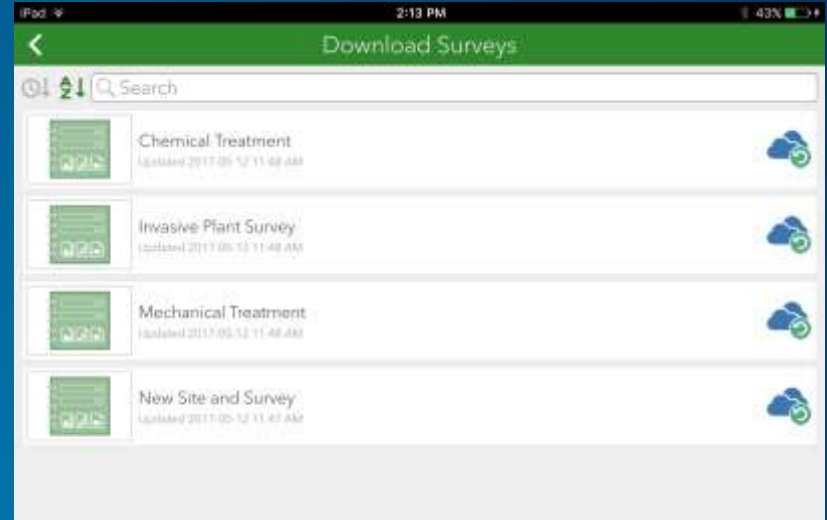
Brown knapweed

Bull thistle

Burdock species

Canada thistle

Treatment Method *



- Start collecting valuable data!

Lessons Learned

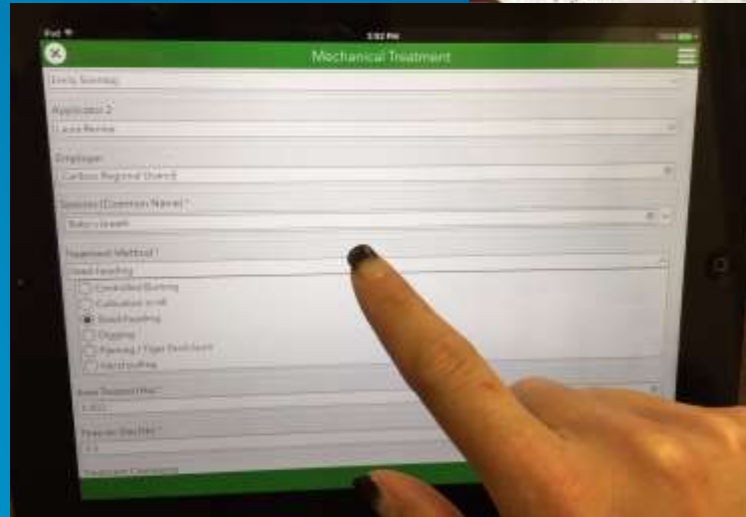
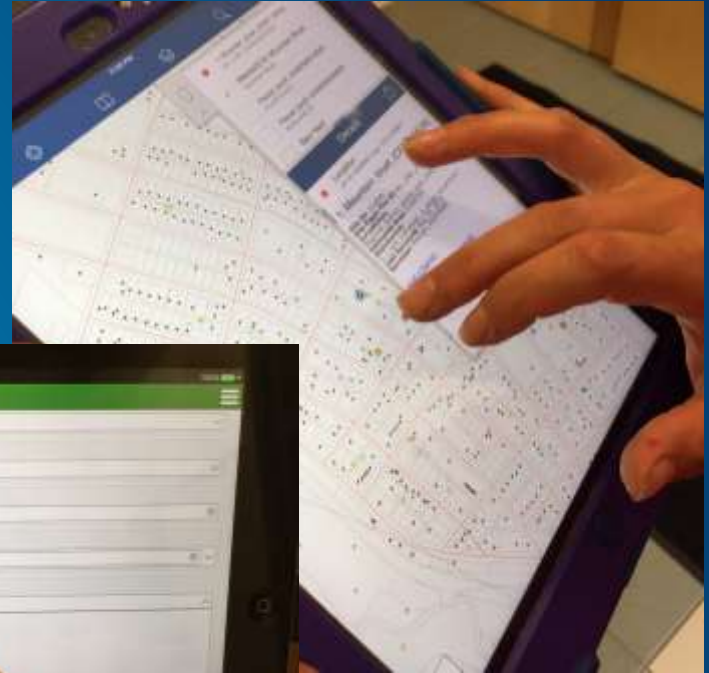


Simple is
Good

- **K.I.S.S.**
- **The ESRI apps are intuitive for the end user**
- **ESRI Support was very helpful and knowledgeable with configuration of Apps with ArcGIS Online**

Future Plans

- Hopeful for more integration, specifically between Collector and Survey123



Questions?



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building communities together

